

⊗ PAY LIMITS FOR TYPE "W" STEEL RAILING.

LEGEND

- ① W 6 x 25 WITH $\frac{3}{4}$ " x $2\frac{1}{2}$ " VERT. SLOTS IN FLG. (SLOT ON OTHER SIDE OF WEB IS OPTIONAL) FOR NO. 7. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POSTS VERTICAL AND NORMAL TO GRADE LINE.
- ② C 8 x 11.5 WITH $\frac{1}{8}$ " DIA. HOLES FOR NO. 8.
- ③ BASE PLATE 1" x $9\frac{1}{2}$ " x 10" WITH $\frac{1}{16}$ " x $\frac{1}{2}$ " SLOTTED HOLES FOR ANCHOR BOLTS NO. 4. WELD TO NO. 1 AS SHOWN.
- ④ A325 - $\frac{7}{8}$ " HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 14" LONG AT END POSTS AND AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 15". USE 8" LONG AT ALL OTHER LOCATIONS. 4 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 3. CHAMFER TOP OF BOLTS BEFORE THREADING.
- ⑤ $\frac{1}{4}$ " x 8" x 8" FLAT BAR, WITH $\frac{1}{8}$ " DIA. HOLES FOR ANCHOR BOLTS NO. 4.
- ⑥ $1\frac{3}{4}$ " x 3" MOUNTING BOLT WASHER (GALVANIZED.)
- ⑦ $\frac{5}{8}$ " DIA. BUTTON HEAD POST MOUNTING BOLT WITH ROUND WASHER AND NUT.
- ⑧ $\frac{5}{8}$ " DIA. x 2" HEX BOLTS WITH NUT AND TWO WASHERS EACH.
- ⑨ PLATE $\frac{1}{2}$ " x $5\frac{3}{4}$ " x 6" AT BASIC POST CONNECTION. $\frac{1}{4}$ " DIA. HOLES IN PLATE. $\frac{9}{16}$ " DIA. HOLES IN CHANNEL.
- ⑩ PLATE $\frac{1}{2}$ " x $5\frac{3}{4}$ " x $1'-2\frac{1}{2}"$. $\frac{1}{4}$ " DIA. HOLES IN PLATE. $\frac{9}{16}$ " DIA. HOLES IN CHANNEL. EXPANSION SLOTS ON JOINT SIDE OF POST. $\frac{1}{16}$ " x $2\frac{1}{4}$ " IN PLATE. $\frac{9}{16}$ x $2\frac{1}{4}$ " IN CHANNEL. (AT EXPANSION SPLICE.)
- ⑪ PLATE $\frac{1}{2}$ " x $5\frac{3}{4}$ " x $11\frac{1}{2}"$. $\frac{1}{4}$ " DIA. HOLES IN PLATE. $\frac{9}{16}$ " DIA. HOLES IN CHANNEL. (AT TYPICAL SPLICE.)

BID ITEM SHALL BE STEEL RAILING TYPE "W" WHICH INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 5)
SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND CHANNELS SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY S.S.P.C. SPECS.

ALL MATERIAL USED IN FABRICATION SHALL BE
MADE FROM MATERIALS CONFORMING TO A.S.T.M.
DESIGNATION A709 GRADE 36 UNLESS NOTED
OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS &
PLATE NO. 3 WITH NON-STAINING GRAY NON-
BITUMINOUS JOINT SEALER.

PAY LIMITS FOR "GUARD RAIL" SHALL BE FROM
 ₱ TO ₱ OF END POSTS.

RAIL MEMBERS SHALL BE "W" OR "THRIE" BEAMS
CONFORMING TO A.A.S.H.T.O. M180, CLASS A,
TYPE 2.

CHANNEL MEMBER SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT (EXCEPT AT ABUTMENTS).

AT EXPANSION SLOTS IN RAIL AND CHANNEL MEMBERS, TIGHTEN BOLTS, BACK OFF ONE HALF TURN AND BURR THREADS. RAIL MEMBERS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC AND THE UPPER RAIL SHALL LAP THE LOWER RAIL.

STEEL POST SHIMS MAY BE USED UNDER POSTS
WHERE REQ'D. FOR ALIGNMENT.

 TIE TO TOP MAT OF STEEL.

APPROX. RAILING WT. = 45 #/FT.

STEEL RAILING
TYPE "W"

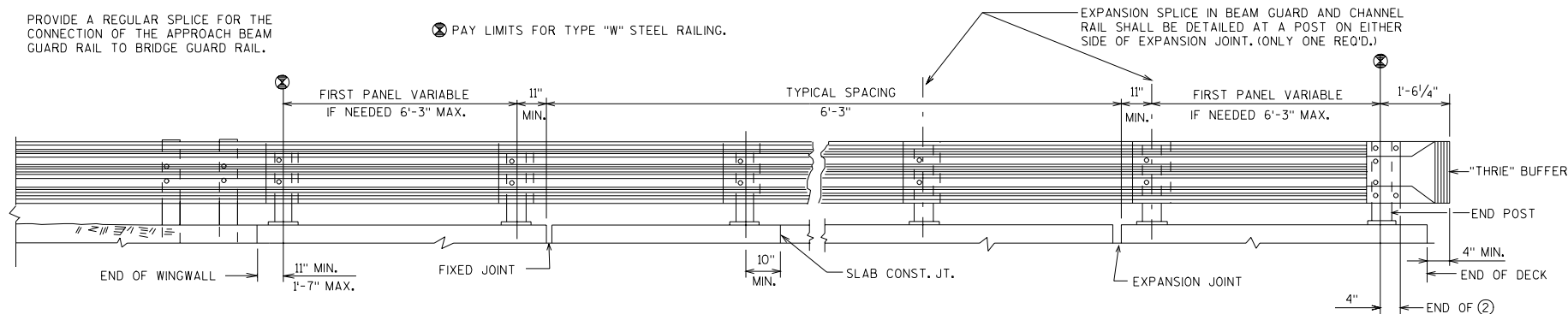
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: _____	DATE: 7/01
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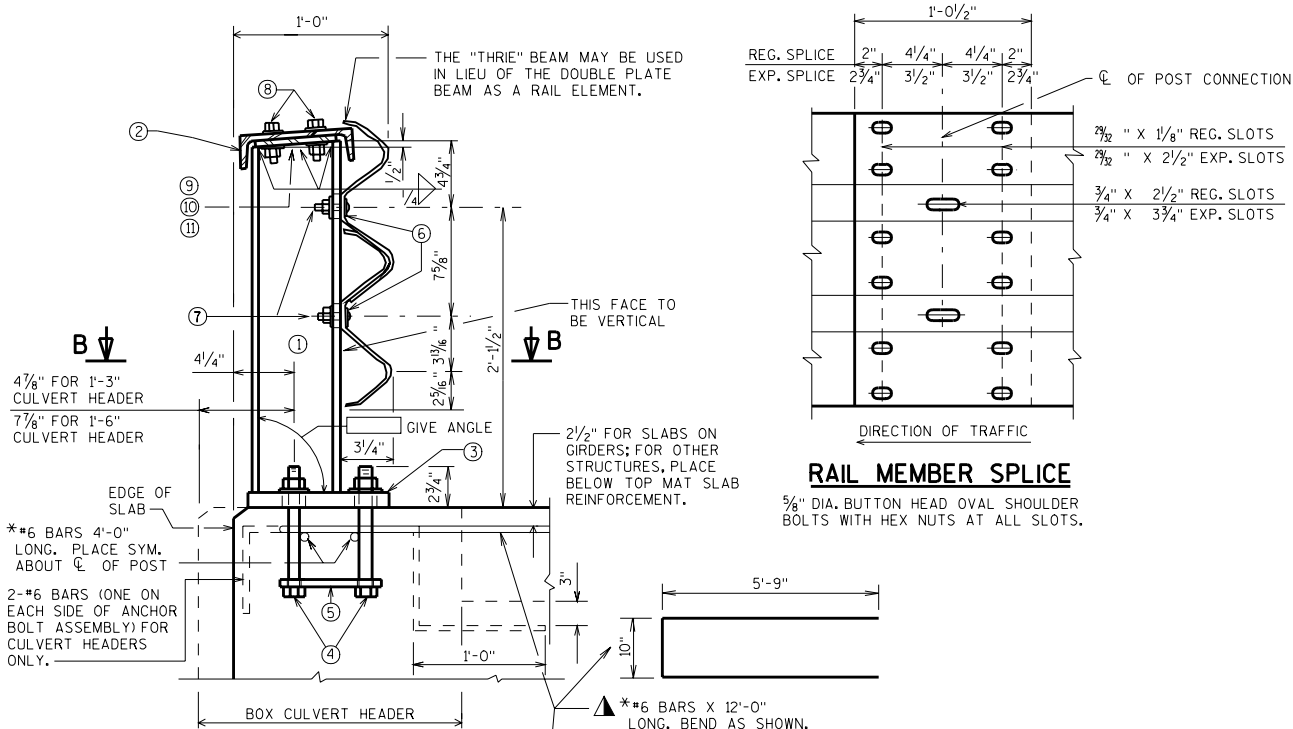
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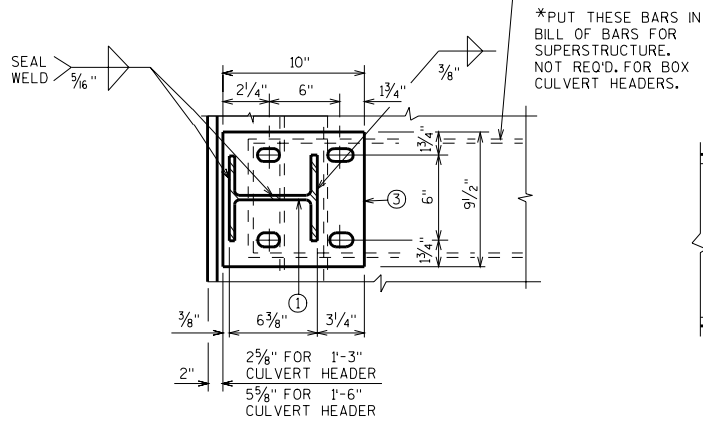
STANDARD	30.2
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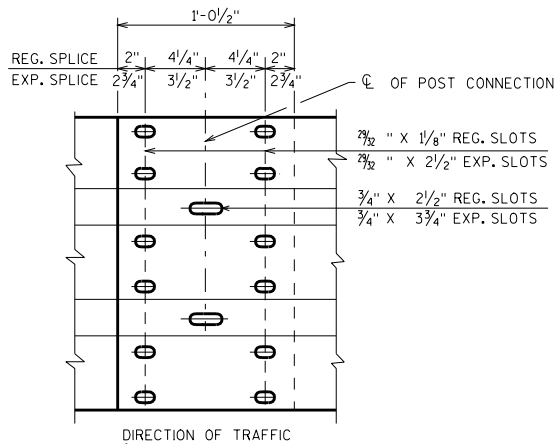
ELEVATION OF RAILING



SECTION THRU RAILING

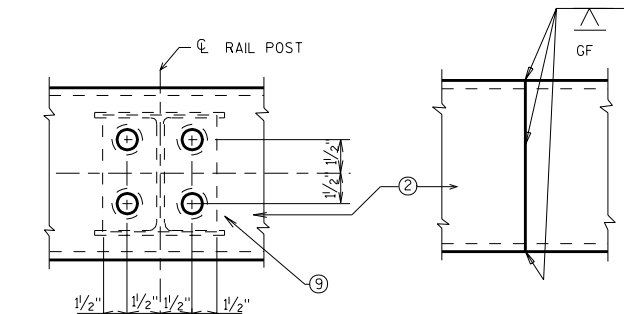


SECTION B-B



RAIL MEMBER SPLICE

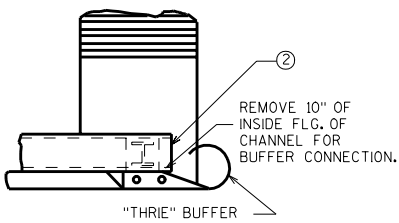
5/8" DIA. BUTTON HEAD OVAL SHOULDER
BOLTS WITH HEX NUTS AT ALL SLOTS.



BASIC POST CONNECTION

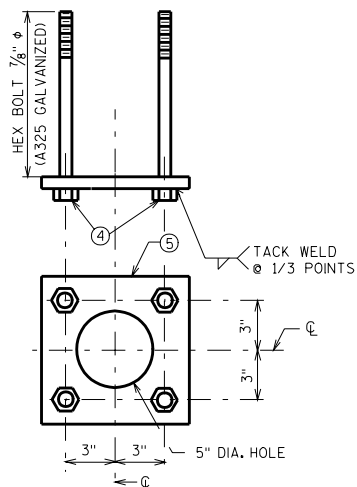
OPTIONAL SPLICE

(SHOP)

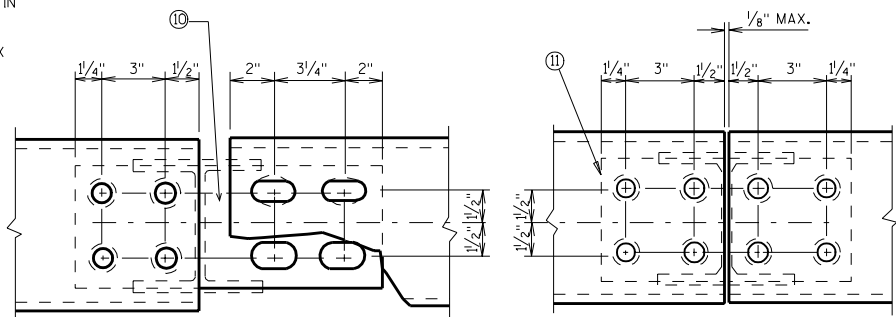


TERMINAL DETAIL

USE FOR LESS THAN 300 A.D.T.



ANCHORAGE DETAIL

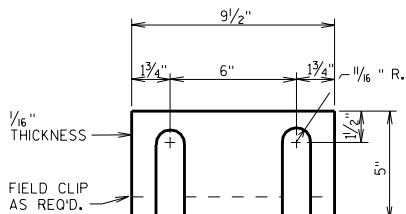


EXPANSION SPLICE

TYPICAL SPLICE

CHANNEL MEMBER DETAILS

(SHIM PLATES 6" X $\frac{1}{16}$ " X 6" MAY BE USED BETWEEN TOP OF POST AND CHANNEL MEMBER TO ACHIEVE VERT. ALIGNMENT.)



POST SHIM DETAIL

(4 PER POST)